

Citizens' Advisory Commission Meeting  
Pueblo Colorado  
Minutes  
January 27, 2016

Members in Attendance:

Irene Kornelly, Chair  
Terry Hart, Vice Chair  
Ken Griffin  
Doug Knappe, for Joe Schieffelin  
John Norton  
Ross Vincent

Members Absent:

Jeff Chostner  
Zak Pierce

**Business**

**Minutes for the December 9, 2015 meeting were approved.**

**Colorado Department of Public Health and Environment Permitting Update**

**Doug Knappe, Unit Leader**

**Hazardous Materials and Waste Management Division**

The state received notice that Explosive Destruction System (EDS) would be temporarily closed at the conclusion of this campaign once it is cleared for the presence of any mustard agent. They are moving through the leakers campaign. The state is working on a number of permit modifications. The facility construction certification continues.

**Pueblo Chemical Agent-Destruction Destruction Program Update**

**What does Pilot Testing Look Like?**

**John Jackson, Plant Support Specialist**

**Start of Pilot Test / Operations**

- Methodical, safe and compliant Operations
- Day 1 process five munitions (155mm) to validate plant, paper and people
- Initial processing at 10% rate, single-line ramp up for ~20 days.
- Joint Test Group review of operating conditions
- Senior review team
  - PCAPP, ACWA, Army Material Systems Analysis Activity (AMSAA)

Convened when unacceptable results are found to develop path forward for continued operations



## **Projectile/Mortar Disassembly (PMD)**

- Objectives
  - Certify monitoring protocol for disposition of dunnage i.e., Over Packed Pallets (OPPs) relative to agent
  - Collect and assess data on reject rates
  - Demonstrate energetics removal/handling and disposition with the PMDs to support the operating schedule
- Approach - PMD
  - Utilize SOP-PT-W0001 with predetermined 155mm munition lots
  - Perform Modified Ammunition Vehicle dock receipt and monitoring of OPPs
  - Perform single-line ramp up of Explosion Containment Room (ECR) with each Operations crew
  - Perform PMD throughput runs and document rejects, off-normal conditions

## **MWS & MTU**

- Objectives – Munitions Washout System (MWS)/Munitions Treatment Unit (MTU)
  - Confirm maximum munitions' body weight limit at the Drained Munitions Weigh Station (DMWS) to allow confirmation of breached munition
  - Establish set points to achieve munition body cleanliness (design of experiments)
  - Recycle munitions bodies, control paint chips, ash dust
  - Demonstrate loss of paint removal system
- Approach – MWS/MTU
  - Calculate reject weight set point using first 59 washed/rewashed munition (mean + 3 standard deviations)
  - Monitor first MTU Bin headspace for agent ( $<0.003\text{mg/m}^3$ ), COPCs, and dioxins/furans
  - Document DMWS weight variability and rejects for the next 325 projectiles – make adjustments as required

## **Agent Neutralization Reactor (ANR)**

- Objectives
  - Validate and define critical operating parameters for agent destruction
  - Agent destruction from 8.6 to 15 wt% agent concentrate
  - Demonstrate ANR operation with loss of agitator
  - Demonstrate throughput supports operating schedule
  - Demonstrate hydrolysate tank glove box operations
- Approach
  - Collect agent and agent wash water in agent water separator
  - Third week - Process first ANR batch - hot water, wash water, spent decon with UP TO 8.6%
  - Generate hydrolysate to holding tank for sampling
  - Fourth week – transfer hydrolysate to 30-day storage tank
  - Perform ANR agent loading to 15 wt%
  - Perform loss of ANR agitator

## **Pilot Testing after first 30 days**

- Off gas Treatment System (OTS)/Agent Filtration Area emissions monitoring
  - MWS/MTU full throughput demonstration
  - ANR full throughput demonstration
  - All Agent Processing Building processing systems operating
  - Loss of OTS bulk oxidizer
  - Perform a nine-day full rate demonstration
- Biotreatment Area (BTA) hydrolysate processing, demonstrate Brine Reduction System (BRS)

- Demonstrate removal of thiodiglycol, and other organics from hydrolysate
- Control fugitive odor emissions
- Process brine concentrate and recover water
- Validate BRS operating ranges and set points
- **Secondary waste processing at Supplemental Decontamination Unit/autoclave**
  - Demonstrate decontamination operations and waste handling
  - Validate monitoring protocol for waste disposal to meet performance criteria
- **Perform Integrated Facility Demonstration**
  - Demonstrate integrated facility operations
  - Generate and collect site-wide emissions data at a sustained processing rate

John Norton: For the first 30 days are you going do to the same number of tests and then ramp up?

John Jackson: Yes, for about 3 week it gets all shifts working day and night.

## Program Updates

**Rick Holmes, Bechtel Project Manager**

**Gregory Mohrman, Site Project Manager**

**Col Thomas Duncan, PCD Commander**

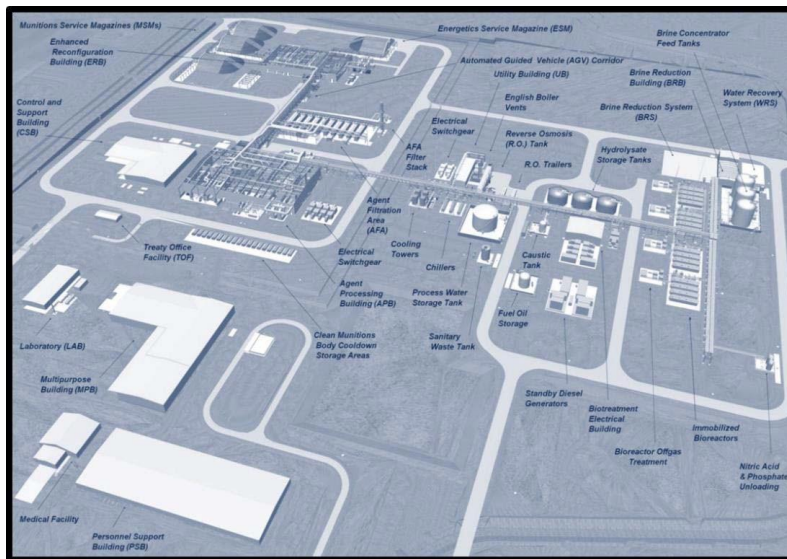
**EDS End-of Campaign Status Update and Temporary Closure**

**Michael Strong, PCAPP Explosive Destruction System Site Project Manager**

## Safety

- Lost-workday case rate is 0.07
- The current Total Recordable Injury Rate (TRIR) is 0.40, which is well below the general industry average of 3.4 and the Waste Management Industry rate of 3.4

## PCAPP Systemization – 96% Complete



System	Complete
UTILITIES	99%
HVAC	99%
FACILITIES	100%

As of December 2015

ERB 100%

APB 100%

BTA 83%

### Countdown to Ops:

- Bid evaluation for waste disposal contracts underway
  - RCRA Managed Waste
  - Landfill Subcontract
- Scaffolding being removed
- Start six week practice run week of February 8

Operational Readiness Review (ORR) work will be paced by Systemization work, primarily system turnovers.

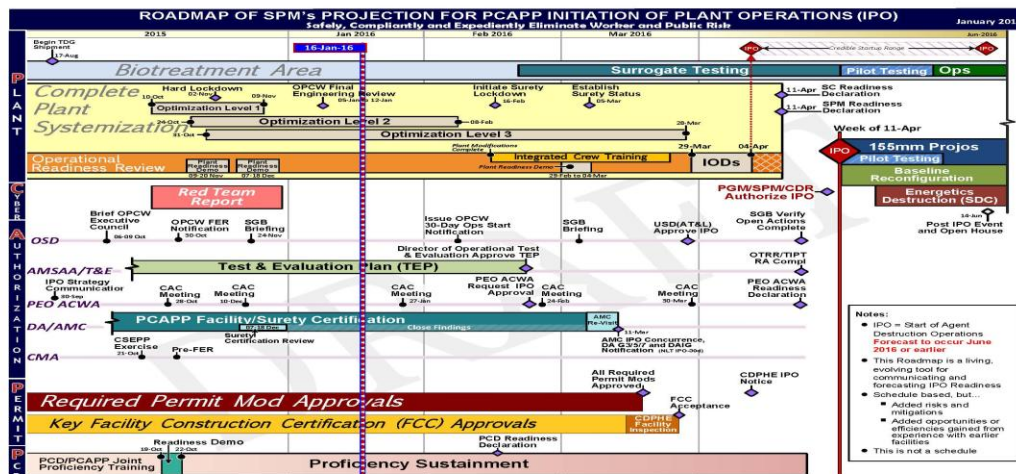
Data current as of 22-Jan -2016

## Salt Water Test Conclusions

- Evaporator demonstrated operation at design rate salt feed of 120 gpm
- Distillate samples over the last three days of testing show that the distillate salt concentrations were well below threshold limits, and even below levels found in the make-up process water used to produce the salt water feed
- Test did not successfully demonstrate filter cake production
  - Pump seal in leakage
  - Crystallizer was unable to heat-up and concentrate the slurry enough to produce crystals within the allotted test period
- Test provided valuable hands-on operator experience and system operational data to be used in follow-on tests
- Test will be re-run in early February to generate salt crystals and demonstrate filter press operation

- \$31,782 Employee Pledges
- \$32,500 Combined Corporate Pledges (Bechtel, AECOM, Battelle)
- \$64,282 2016 Grand Total Pledges

The Roadmap was discussed in detail.



## Col Thomas Duncan, PCD Commander

The Department of Defense (DoD) will hold an audit the week of February 1, 2016, looking at safety, surety and other items.

The site hopes to transfer part of the property (Parcel 1) to PuebloPlex by the end of 2016.

The opening ceremony for the start of site operations is scheduled for June 14, 2016.

## Michael Strong, PCAPP Explosive Destruction System Site Deputy Project Manager

Explosive Destruction System:

Temporary Closure Outline

- Submit 45-day notice to CDPHE (Done 10 Dec 2015)
- Complete destruction operations
- Decontaminate EDS door, vessel, and sump to the Vapor Screening Level and verify cleanliness using Minicams
- Remove, bag out, and air monitor with Minicams to the VSL carbon from Environmental Enclosure #1 filters
- Remove and dispose of all waste from H1102, EE#1, H1103, and remove roll offs
- Monitor H1102 and EE#1 to the VSL after 4 hours at 70 degrees F
- Document all closure activities in the operating record

## Signaling the End of First Campaign

On January 15, 2016, PCAPP EDS reached a significant milestone when operators loaded and destroyed the last two 155mm problematic munitions.

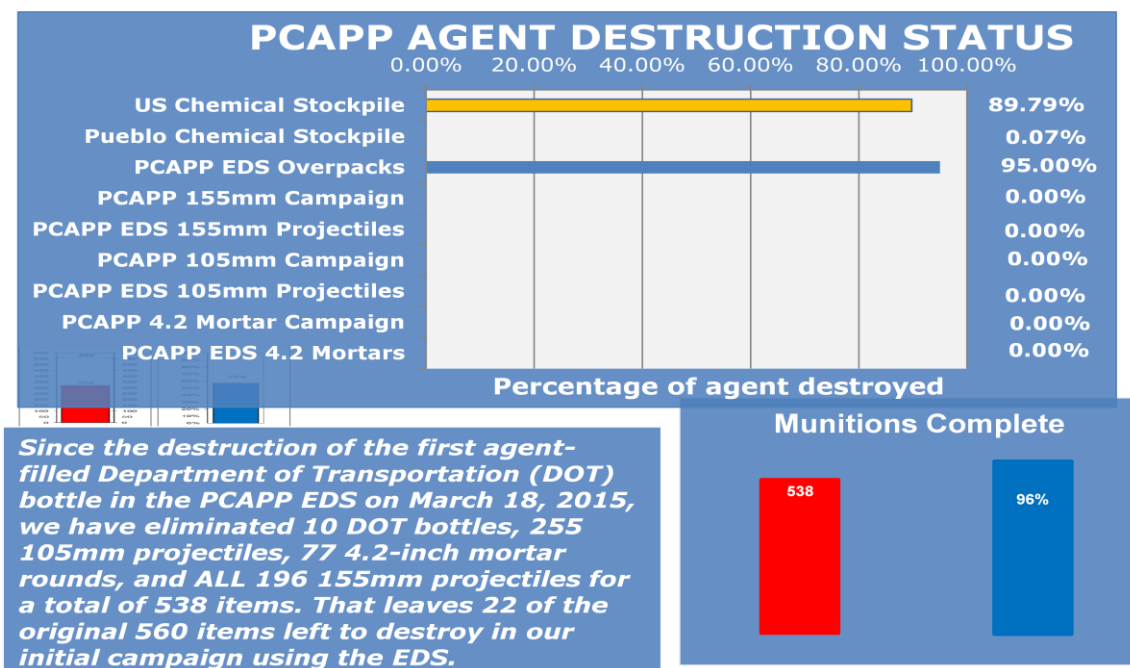
John Norton: How many were leakers of the 549?

Michael Strong: About 20%.

Ross Vincent: What happens to the EDS Unit?

Michael Strong: the Unit referred to as P2R will go back to Maryland. And the site will get a new one.

Pueblo Chemical Stockpile Destruction as of 25 January 2016



**Subcommittee Updates -  
Permitting Working Group – Irene Kornelly  
Biotreatment Utilization Working Group (BUG) John Norton**

**Irene Kornelly (Permitting)**

The Permit modifications were discussed.

March 10, 2016, 6:00pm at the Rawlings library, the documentary “The Winds of Chemical Warfare” will be shown.

**John Norton (BUG)**

The salt cake testing was discussed.

**Closing and Adjournment**

Next Subcommittee meetings are tentatively scheduled:

February 24, 2016 at 2:00pm

District Attorney’s Conference Room

Tentative Date for next CAC meeting: February 24, 2016 at 6:00PM  
Olde Towne Carriage House